REMARKS

This amendment is responsive to the non-final Office Action of August 28, 2009. Reconsideration and allowance of claims 1-16 are requested.

The Office Action

Claims 1-15 stand rejected under 35 U.S.C. § 112, second paragraph.

Claims 1-6 and 12 stand rejected under 35 U.S.C. § 103 over Barnitz (US 5,795,328) as modified by Gehm (US 6,045,331).

Claims 7, 8, 10, 11, 13, and 14 stand rejected under 35 U.S.C. § 103 over Barnitz as modified by Gehm, as further modified by Rousseau (US 6,419,455).

Claims 9 and 15 stand rejected under 35 U.S.C. § 103 over Barnitz, as modified by Gehm, as further modified by de-Simon (US 5,971,725).

35 U.S.C. § 112, Second Paragraph

Claims 1, 3, 4, and 10 have been amended in accordance with the Examiner's suggestions. It should be noted, however, that claim 1 only recites the upper speed value n_1 and claim 3 only recites the lower speed value n_2, making a statement that n_1 is greater than n_2 in these claims inappropriate.

The Claims Distinguish Patentably Over the References of Record

Barnitz discloses a vacuum pump for aspiration of an ophthalmic surgery site. Such a vacuum pump is comparable to a vacuum cleaner in that it is configured to operate at substantially constant inlet pressures. Such a pump could not be used as a fore vacuum pump.

Barnitz describes a vacuum system in which a vacuum line 12 is to be evacuated by a pump 14 and a valve 34 is connected to the vacuum line. In column 4, lines 45-58 of Barnitz, the general operating principle is described. As described, the pump can generally be operated in a first pressure range in which the pressure to be maintained in the vacuum line 12 is higher than 100 mmHg, and in a second pressure range in which the pressure to be maintained in the vacuum line is lower than 100 mmHg. The high inlet pressure in the first pressure range is maintained by operating the pump at constant speed and adjusting the inlet pressure with the valve 34 "to conduct sufficient ambient air into the vacuum line to raise the pressure therein to the

desired value" (column 4, lines 52-54). The low inlet pressure in the second pressure range is maintained by closing the valve 34 and varying the speed of the pump 14 "to adjust the pressure in the vacuum line to the desired value" (Barnitz, column 4, lines 56-58).

In other words, a pre-set pump inlet pressure at which pump 14 is operated for aspirating a surgical site is selected as a constant value. A system control means controls and adjusts the actual pressure to the desired operating pressure (Barnitz, column 4, lines 31-38). In the second pressure region, the preselected operating pressure is achieved by adjusting the pump speed to a preselected operating speed.

However, this principle differs from the alteration range set forth in the claims of the present application in which different speed values are associated with different inlet pressure values in order to reach the final pressure more rapidly.

The only passage in Barnitz referring to how the final pressure can be more rapidly reached is in column 5, lines 36-48, according to which:

> pump 14 may be temporarily operated, for example, at the start-up of system 10, at maximum capacity, greater than 500 mm of mercury, in order to reach more quickly a desired operating vacuum pressure in vacuum line 12.

This passage explains that in order to reach the final pressure more quickly, the pump differential pressure can be temporarily increased to maximum capacity until the desired pressure is reached.

In other words, during normal operation, the pump pressure is pre-set to 100 mmHg (mm of mercury) in the first pressure range and to an adjustable value between 100 and 500 mmHg in the second pressure range. This pressure is to be maintained constant, unless the pump is temporarily operated at maximum capacity during start-up. Barnitz clearly teaches operating the pump at a constant pressure, namely at its maximum capacity during start-up until the operating vacuum pressure is reached.

By distinction, in the present claims, an alteration range is called for in which each value of the pressure p is associated with a corresponding speed value n_v.

Gehm does not cure these shortcomings of Barnitz. Gehm, like Barnitz, does not teach the claimed alteration range. Gehm describes a calibration

mode for calibrating specific motor speeds at which the pump is to be operated (column 4, lines 15-31). During operation, the pump is initially run at the fastest setting and subsequently, as described in column 5, lines 31-43, during certain time intervals, run at incrementally decreased discrete motor speeds. The motor speed is not adjusted depending on the current pump inlet pressure. To the contrary, it is adjusted depending on a lapse of specific time intervals. Values of the inlet pressure are not at all associated with corresponding speed values.

Thus, neither Barnitz nor Gehm suggest inlet pressure values being associated with a corresponding speed value. Accordingly, the combination of Barnitz and Gehm would not result in the subject matter of claims 1 and 3 or the claims dependent therefrom.

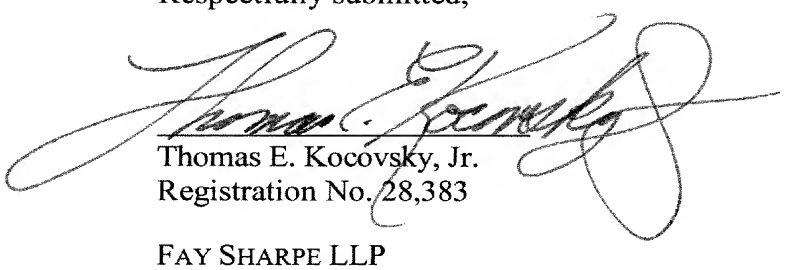
Claim 10 also calls for each pressure value to be associated with a corresponding speed value. **Rousseau** does not cure the above-discussed shortcomings of Barnitz and Gehm. Rather, Rousseau is silent about any alteration range for inlet pressure values, much less inlet pressure values being associated with a corresponding speed value. Accordingly, it is submitted that claim 10 and claims 11 and 16 dependent therefrom distinguish patentably and unobviously over the references of record.

CONCLUSION

For the reasons set forth above, it is submitted that claims 1-16 distinguish patentably over the references of record and comply with the other statutory requirements. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, the Examiner is requested to telephone Thomas Kocovsky at 216.363.9000.

Respectfully submitted,



Thomas E. Kocovsky, Jr.
Registration No. 28,383

FAY SHARPE LLP
The Halle Building, 5th Floor
1228 Euclid Avenue
Cleveland, OH 44115-1843
Telephone: 216.363.9000 (main)
Telephone: 216.363.9122 (direct)
Facsimile: 216.363.9001
E-Mail: tkocovsky@faysharpe.com

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